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AUG 24 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	SUNG-JAE MOON	)
		) Group Art Unit:
Serial No.:	10/619,665	) 2871
		)
Filed:	July 15, 2003	) Examiner:
		) Dudek, James A.
For:	LIQUID CRYSTAL DISPLAY AND TESTING	)
	METHOD THEREOF	)

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In response to the Final Office Action mailed May 24, 2006, and in conjunction with the Notice of Appeal filed concurrently herewith, the Applicants submit the following remarks in support of the Pre-Appeal Brief Request for Review:

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**REMARKS**

The present submission is responsive to the Final Office Action of May 24, 2006 2005, in which claims 1-13 are presently pending. Claims 1-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Katsumi, et al., U.S. Patent No. 5,608,558 (hereinafter "Katsumi") for the reasons stated on pages 2-4 of the Office Action.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Further, even assuming that all elements of an invention are disclosed in the prior art, an Examiner cannot establish obviousness by locating references that describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would have impelled one skilled in the art to do what the patent applicant has done. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. Int. 1993). The references, when viewed by themselves and not in retrospect, must suggest the invention. *In Re Skoll*, 187 U.S.P.Q. 481 (C.C.P.A. 1975). Here, all the elements are not disclosed in the prior art and even if combined, which there is no suggestion or motivation therefor, Applicant's invention does not result for the reasons set forth below.

The Examiner states that Katsumi teaches all of the elements of the above-mentioned claims, except that the test line is formed on the TFT array panel, which the Examiner further states that it is well known to form test lines [on] the substrate at the same time of forming the TFTs in order to reduce the number of process/manufacturing steps required.

However, it is respectfully submitted that not only does Katsumi fail to disclose an inspection line formed on the TFT array panel, but Katsumi also fails to disclose a test pad formed on the TFT array panel and connected to the inspection line, contrary to the Examiner's position. More specifically, the Examiner states on page 2 of the Detailed

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Action that Kasumi teaches "an inspection line formed on the TFT array panel for receiving the test signals to the second display signal lines [see lines on TABs 9a and 9b] ...."

On the contrary, it is respectfully submitted that Katsumi teaches, with respect to FIG. 7 relied upon by the Examiner, a defect detection apparatus including a flexible wiring substrate, namely a tape automated bondings ("TABs") 8, 9a and 9b. TAB 8 connects odd-numbered gate lines (1) to terminal (A1) and even -numbered gate bus lines (1) to terminal (A2) on the TAB 8. The source bus lines (2) are connected through a common line to terminal (B) on TAB 9a. (Column 11, lines 1-8 of Katsumi).

Thus, Katsumi does not teach or suggest an inspection line formed on the TFT array panel for transmitting a test signal to the second display signal lines, and a test pad formed on the TFT array panel and connected to the inspection line, for receiving the test signal, as recited in claim 1. Therefore, claim 1, including claims depending therefrom, i.e., claims 2-11, define over Katsumi.

Further, it is respectfully submitted that the Examiner improperly equates the claimed limitation of "external devices" of claim 9 as being the external device on the flexible printed circuit films (9a), which the Examiner equates as the inspection lines for his claim analysis of claim 1. Thus, the Examiner inconsistently identifies the elements of Katsumi and improperly characterizes the same to read on Applicants' recited claim limitations.

To further support this assertion, the Examiner equates lines (13) as connecting lines for the rejections of claims 4 and 5, and then states for his rejection of claim 6 that Katsumi teaches the test pad is closer to an edge of the liquid crystal panel than to the connecting lines. It is further noted that the lines (13) of Fig. 7 of Katsumi are spare lines (13) connected to terminal D, and that Katsumi does not teach or suggest such lines (13) interconnecting the drivers, as recited in claim 4.

As stated above, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to

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modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP § 2143. As outlined above, the prior art does not teach all of the claim limitations, and thus, all three basic criteria have not been met. Therefore, the Examiner has not met the requirements for a *prima facie* case of obviousness.

Accordingly, it is respectfully requested that the rejection of claims 1-11 under § 103(a) be withdrawn and allow the same to issue.

Still further, in response to Applicant's arguments filed March 13, 2006, the Examiner agrees that Katsumi does not teach the inspection lines and pads [on] the active substrate. However, the Examiner alleges that "it was well known and motivation was provided; see rejection *supra*."

Pursuant to MPEP § 2144.03, Applicant first points out that the body of the rejection to claim 1 (on page 2 of the Detailed Action) only concedes that Katsumi lacks the test line formed on the TFT array panel. The Examiner alleges that it was well known to form test lines [on] the substrate in order to form the test lines at the same time the TFTs are formed and thus reduce the process steps required. Then the Examiner states at page 4 of the Detailed Action that it was well known to form inspection lines AND test pads [on] the active substrate.

Official notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. While "official notice" may be relied on, these circumstances should be rare when an application is under final rejection or action under 37 CFR 1.113. Official notice unsupported by documentary evidence should only be taken by the Examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the Examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)).

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MPEP § 2144.03(A).

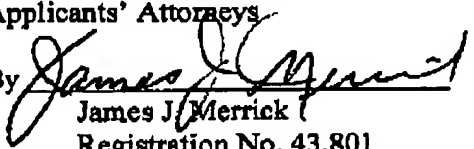
As indicated above, Applicant has pointed out the Examiner's inconsistency of what Katsumi discloses and what is alleged to be well known in the art. Therefore, the Applicant respectfully requests the Examiner to produce authority for his statements, as the record thus far is absent and inconsistent. The Examiner has not invoked any identifiable authority to support his assertions. When a rejection is based on facts within the personal knowledge of the Examiner, the data should be stated as specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the Examiner. Such an affidavit is subject to contradiction or explanation by the affidavits of the Applicant and other persons. See 37 CFR 1.104(d)(2). It is respectfully submitted that the record currently amounts to no more than mere conclusory statements of generalized advantages and convenient assumptions about skilled artisans, and therefore, Applicant requests concrete evidence in the record to stand appellate review for substantial evidence on the record.

For the above stated reasons, it is respectfully submitted that the final rejection of claims 1-12 is in error and that the same are allowable over the art of record. The fee set forth in 37 CFR 41.20(b)(1) is enclosed herewith. However, if any fees are due with respect to this submission, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,  
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